Early Journal Content on JSTOR, Free to Anyone in the World

This article is one of nearly 500,000 scholarly works digitized and made freely available to everyone in the world by JSTOR.

Known as the Early Journal Content, this set of works include research articles, news, letters, and other writings published in more than 200 of the oldest leading academic journals. The works date from the mid-seventeenth to the early twentieth centuries.

We encourage people to read and share the Early Journal Content openly and to tell others that this resource exists. People may post this content online or redistribute in any way for non-commercial purposes.

Read more about Early Journal Content at http://about.jstor.org/participate-jstor/individuals/early-journal-content.

JSTOR is a digital library of academic journals, books, and primary source objects. JSTOR helps people discover, use, and build upon a wide range of content through a powerful research and teaching platform, and preserves this content for future generations. JSTOR is part of ITHAKA, a not-for-profit organization that also includes Ithaka S+R and Portico. For more information about JSTOR, please contact support@jstor.org.

VOL. 30 JULY, 1903 No. 7

BULLETIN

OF THE

TORREY BOTANICAL CLUB

EDITOR

JOHN HENDLEY BARNHART

ASSOCIATE EDITORS

NATHANIEL LORD BRITTON
TRACY ELLIOT HAZEN
MARSHALL AVERY HOWE
DANIEL TREMBLY MACDOUGAL
WILLIAM ALPHONSO MURRILL
HERBERT MAULE RICHARDS
ANNA MURRAY VAIL

CONTENTS

A Preliminary Enumeration of the Grasses of Porto Rico: *George V. Nash* . 369
On the Physiological Action of some of the Heavy Metals in Mixed Solutions: *Rodney H. True and William J. Gies* 390
The Phyllodes of *Oxypolis filiformis*, a Swamp Xerophyte: *Rosina J. Rennert*. 405
Some common Types of Lichen Formations: *Bruce Fink* 412
INDEX TO RECENT LITERATURE RELATING TO AMERICAN BOTANY 419

PUBLISHED FOR THE CLUB

THE NEW ERA PRINTING COMPANY
LANCASTER, PA.

THE TORREY BOTANICAL CLUB

President,
HON. ADDISON BROWN, LL.D.

Vice-Presidents,
HENRY H. RUSBY, M.D. EDWARD S. BURGESS, PH.D.

Recording Secretary,
F. S. EARLE, A.M.
Botanical Garden, Bronx Park, New York City.

Corresponding Secretary,
JOHN K. SMALL, PH.D.,
Botanical Garden, Bronx Park, New York City.

Treasurer,
FRANCIS E. LLOYD
Columbia University, New York City.

Meetings the second Tuesday and last Wednesday of each month alternately at the College of Pharmacy and the New York Botanical Garden.

PUBLICATIONS. **Bulletin.** Monthly, established 1870. Price $3.00 per year; single numbers 30 cents. Of former volumes only 1–6, 13, and 19–29 can be supplied entire. Partial numbers only of vols. 7–18 are available, but the comp'etion of sets will be undertaken. Manuscripts intended for publ cation should be directed to John Hendley Barnhart, Editor, New York Botanical Garden, Bronx Park, New York City; all other correspondence to Francis E. Lloyd, Treasurer, Columbia University, New York City.

Torreya. Monthly, established 1901. Price $1.00 per year. Address the editor, Dr. Marshall A. Howe, New York Botanical Garden, Bronx Park, New York City.

Memoirs. Occasional, established 1889. (See last page of cover.)

Preliminary Catalogue of Anthophyta and Pteridophyta within 100 miles of New York City, 1888. Price $1.00. Address the Treasurer.